



IAX2

**HALF-WAVE VACUUM RECTIFIER**

9-PIN MINIATURE TYPE

IAX2

**GENERAL DATA****Electrical:**

Filament, Coated:

Voltage . . . . . 1.4 . . . . . ac volts

Current . . . . . 0.65 . . . . . amp

Direct Interelectrode Capacitance:<sup>o</sup>Plate to filament . . . . . 0.7 max.  $\mu$ f**Mechanical:**

Mounting Position . . . . . Any

Maximum Overall Length . . . . . 2-27/32"

Seated Length . . . . . 2-7/16"  $\pm$  1/8"

Maximum Diameter . . . . . 7/8"

Dimensional Outline . . . . . See General Section

Bulb . . . . . T-6-1/2

Cap . . . . . Skirted Miniature (JETEC No.C1-2 or C1-33)

Base . . . . . Small-Button Noval 9-Pin (JETEC No.E9-1)

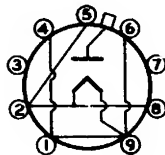
Basing Designation for BOTTOM VIEW . . . . . 9Y

Pin 1 - Filament,  
Internal  
Shield

Pin 2 - Filament

Pin 3 - No Con-  
nection $\blacklozenge$ 

Pin 4 - Same as Pin 1



Pin 5 - Same as Pin 2

Pin 6 - Same as Pin 1

Pin 7 - Same as Pin 3

Pin 8 - Same as Pin 2

Pin 9 - Same as Pin 1

Cap - Plate

**PULSED-RECTIFIER SERVICE****Maximum Ratings, Design-Center Values Except as Noted:***For operation in a 525-line, 30-frame system<sup>□</sup>*

PEAK INVERSE PLATE VOLTAGE

(Absolute maximum) . . . . . 25000<sup>■</sup> max. volts

PEAK PLATE CURRENT . . . . . 11 max. ma

AVERAGE PLATE CURRENT . . . . . 1 max. ma

**Typical Operation:**

Peak Plate Supply Voltage:

Positive pulse value . . . . . 20000 volts

Negative pulse value . . . . . 5000 volts

DC Output Voltage (Approx.) . . . . . 20000 volts

DC Output Current (Approx.) . . . . . 300  $\mu$ amp<sup>o</sup> Without external shield. $\blacklozenge$  May be connected to one side of filament, or used as a tie point for filament dropping resistor; otherwise do not use.<sup>□</sup> As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.<sup>■</sup> Under no circumstances should this absolute value be exceeded.

1AX2



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### OPERATING CONSIDERATIONS

*Filament Voltage Adjustment.* When the filament is supplied from an rf source and is at a high dc potential above ground, adjustment of the filament voltage by direct measurement is impractical. To insure that the rated voltage is applied to the filament, a simple method utilizing a visual color match of two incandescent filaments in a darkened room may be used. In this method, the rf filament voltage, obtained from a pulse-power source, is adjusted until the color of this filament matches that of the filament of another 1AX2 operated from a dc or low-frequency ac supply of 1.4 volts.

*X-rays.* The voltages employed in some television receivers and other high-voltage equipment are sufficiently high that high-voltage rectifier tubes may produce X-rays which can constitute a health hazard unless such tubes are adequately shielded. Relatively simple shielding should prove adequate, but the need for this precaution should be considered in equipment design.